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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,945	03/27/2001	Hsuan-Yin Lan-Hargest	12938-002001	5280

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EXAMINER

WANG, SHENGJUN

ART UNIT PAPER NUMBER

1617

DATE MAILED: 10/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/812,945

Applicant(s)

LAN-HARGEST ET AL.

Examiner

Shengjun Wang

Art Unit

1617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 25 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-18,21-24 and 32-53 is/are pending in the application.
- 4a) Of the above claim(s) 3,11,13-16,21-24,32-39 and 47-53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_.

520

**DETAILED ACTION**

Receipt of applicants' remarks submitted July 25, 2005 is acknowledged. The remarks are persuasive as to the elected compound 7-phenyl-2, 4,6-heptatrienoylhydroxamic acid is within the scope of elected invention group IV.

1. Claims 3, 11, 13-16, 21-24, 32-39, 47-53 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on April 11, 2005.

Applicant's election with traverse of invention group IVa, A method of inhibiting histon deacetylation activity in cells comprising contacting the cells with an effective amount of a compound of formula (I), thereby treating cancer, wherein X1, X2 together with the carbon attached is a hydroxamic acid group, and wherein A is a phenyl group, or an aryl group (as those defined in claim 17), excluding compounds wherein Y2 is a bond and Y1 is CH2, in the reply filed on April 11, 2005 is acknowledged. On reconsideration, subgroup a) and b) are combined as one group. The traversal is on the ground(s) that search of the entire scope is not an undue burden. This is not found persuasive because the several inventions above are independent and distinct, each from the other, as they are directed to treating diseases with distinct etiologies and symptoms, and have acquired a separate status in the art of treating as a separate subject matter for inventive effect and require independent searches. It is noted that a reference to one treatment would not be a reference to another treatment under 35 U.S.C. 103. Further, the claims read on a multitude of structurally distinct compounds, and a variety of disorders, which would require many field of searches that would be an undue burden on the Examiner. Therefore, restriction for

Art Unit: 1617

examination purposes is proper. Further, the claim was examined only as they read on elected species, and not on the full scope, before the filing of appeal.

It is noted applicants do not particularly response to the restriction requirements set forth at page 5 of the office action mailed March 11, 2005. However, the selection of the species 7-phenyl-2, 4,6-hepatrienoylhydroxamic acid would effectively elect the subgroup a) wherein A is a phenyl group.

2. The requirement is still deemed proper and is therefore made FINAL.
3. The elected species was found allowable, and the search extended to no-elected species.

#### *Claims Objection*

4. Claims 40 and 41 are objected to as being dependent upon a rejected base claim, and read on nonelected invention, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The elected compound, 7-phenyl-2, 4,6-hepatrienoylhydroxamic acid, and those compounds of claim 40 and 41, which read on elected invention were found allowable. Note many compounds in claims 40 and 41 do not read on elected invention, such as 8-phenyloctanoylhydroxamic acid (L is a saturated alkyl), 6-phenyl-3, 5-hexadieonoylhydroxamic acid (Y1 is CH<sub>2</sub>), etc.

***Claim Rejections 35 U.S.C. 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1-2, 4-7, 9-10, 12, 17-18, 42-46 are rejected under 35 U.S.C. 102(b) as being anticipated by Parsons et al (WO 98/55449).

7. Parsons teaches a method of inhibiting cancer cell growth by contacting the cell with a histone deacetylation inhibiting hydroxamic acids, wherein the hydroxamic acids have an polar group linked to the hydroxamic acid moiety through a linker, wherein the polar group may be amino, hydroxyalkyl, haloalkyl. The linker may contain unsaturated carbon-carbon bond. See, particularly, the abstract, pages 6-16, and particularly, compound Vg in claim 15.

***Claim Rejections 35 U.S.C. 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-2, 4-7, 9-10, 12, 17-18, 42-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parsons et al (WO 98/55449).

Art Unit: 1617

10. Parsons teaches a method of inhibiting cancer cell growth by contacting the cell with a histone deacetylation inhibiting hydroxamic acids, wherein the hydroxamic acids have an polar group linked to the hydroxamic acid moiety through a linker, wherein the polar group may be amino, hydroxyalkyl, haloalkyl. The linker may contain unsaturated carbon-carbon bond. See, particularly, the abstract, pages 6-16, and particularly, compound Vg in claim 15.

11. Parsons et al do not teach expressly the employment of the particular compounds herein for treating cancer.

However, it would have been prima facie obvious to a person of ordinary skill in the art, at the time the claimed the invention was made, to use the compounds herein for treating cancer because those compounds are disclosed as useful for treating cancer. The employment of the particular compounds herein is seen to be a selection from amongst equally suitable material and as such obvious. Ex parte Winters 11 USPQ 2<sup>nd</sup> 1387 (at 1388).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shengjun Wang whose telephone number is (571) 272-0632. The examiner can normally be reached on Monday to Friday from 7:00 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 1617

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

**SHENGJUNWANG**  
**PRIMARY EXAMINER**  
Shengjun Wang  
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Art Unit 1617